A SHORT

HISTORY OF MEDICINE,

FROM THE EARLIEST PERIODS, UP TO THE REVIVAL OF LITERATURE;

AN INTRODUCTORY LECTURE,

DELIVERED MARCH 28TH, 1850, IN THE

PHILADELPHIA COLLEGE OF MEDICINE,

BY JAMES BRYAN, M. D.,

PROFESSOR OF INSTITUTES AND MEDICAL JURISPRUDENCE.

Quicquid præcipies, esto brevis: ut cito dicta
Percipiant animi dociles, teneantque fideles.—Hor.

PUBLISHED BY THE CLASS.

PHILADELPHIA:
ANDREW SCOTT, PRINTER, 115 CHESTNUT STREET.
1850.

CORRESPONDENCE.

PHILADELPHIA, March 25, 1850.

PROFESSOR JAS. BRYAN, M. D.,

Dear Sir:—At a meeting of the Students of the Philadelphia College of Medicine, held this morning, Mr. G. Henry King, of S. C., being Chairman, and Mr. M. Rizer, of Pa., Secretary; the undersigned were appointed a Committee to wait upon you for the purpose of requesting a copy for publication, of your very excellent and instructive Introductory Lecture, delivered before the Class on Monday evening, the 18th inst. Hoping you will comply,

We are respectfully yours, &c.,

G. HENRY KING, S. C., Chairman.	G. W. BOOTHE, Miss.
M. RIZER, Penn., Secretary.	J. HARMAN, Del.
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Committee.

PHILADELPHIA, March 26, 1850.

To Messrs. KING, RIZER, MORTON, TYSON, and others:

Gentlemen—Your polite note of yesterday, requesting in behalf of the Medical Class, a copy of my Introductory Lecture, for publication, is before me. I have only to say that it is entirely at your disposal, and to add, in the language of Dr. J. Friend, in his preface to his very interesting "History of Physick," (1723,) "If this short History of Physick can be of any use or entertainment to those who are versed in the *Ancients*, or can excite others to be better acquainted with them, I shall think my labor very well employed; or if it should not, I shall not at all be dissatisfied with having amused myself in this way." Very truly and respectfully yours,

JAMES BRYAN,
N. E. corner Tenth and Arch streets.

HISTORY OF MEDICINE.

"ALL professional men," says Goethe, "labor under the great disadvantage of not being allowed to be ignorant of what is useless; every one fancies that he is bound to transmit what is believed to have been known." This complaint, which is made with reference to the history of the sciences, has different relations to different departments. The purely empirical sciences may with propriety be divested of their suppositions and conjectures. Their practical facts having been obtained, all previous speculations may be consigned to oblivion.

In the pursuit of philosophical doctrines, however, the progress of which is marked by a regular arrangement, and represents epochs of the development of the human mind; the history of the science is properly the science itself.

As medicine may with great propriety be denominated a system of both empirical and philosophical doctrines, its history must necessarily be valuable to the enquiring student. That part of it which is philosophical, will bear some relation to the philosophy of every age; while that which is empirical, being the result of a multitude of observations from age to age, will be best understood by a sketch of its history. I propose considering the subject under four chief heads, or periods; viz: 1st. The primeval period, or that which preceded the development of the sciences in general, among the Greeks and Romans.

2d. The ancient period, or that which includes the cultivation of science, art, and literature, in Greece and elsewhere.

3d. The medieval period, which may be divided into two sections; first, the scholastic, embracing the decline of ancient art and science—second, the revival of science and literature.

4th. The new period, which will include a sketch of our science, in its several departments, in what are denominated *modern* times.

In discussing this subject in these several periods, I must necessarily premise, first, the general character of the age; second, the general health and diseases of the age; third, the medical doctrines; fourth, the art, or practice of the profession; and fifth, a recapitulation of the chief facts connected with each period.

Tradition and history unite in declaring that man in the early periods of the world, lived in a pastoral, or at most in an agricultural state; "his meat the fruits, his drink the crystal rill."

The diseases of this condition of society must of course be very simple, and like those of the inferior animals, comparatively few in number. A great analogy must exist between the diseases of this condition and those of the hunter state. The descendants of Nimrod, the North American Indian, the wandering Arab, and similar classes of men, have in addition to those simple diseases, a number of surgical disorders, the results of their nomadic and warrior life. This state of society, in the cases of the Jewish and Egyptian nations, existed but for comparatively a short time. The former people, on acquiring the land of Canaan, became possessed of cities and towns, built by their conquered enemies; while the Nilotic races seem to have built their own cities, towns, and pyramids. Civilization, and its multiform diseases flourished for ages, in this ancient and fertile country. We are accordingly informed by Herodotus, in his imperfect account of our science in Egypt, that (proof of its high state of advancement) medicine was divided, and sub-divided into a great number of branches; that there were occulists, aurists, bone setters, dentists, and many other professors and practitioners of the healing art, in all its ramifications; and indeed the paintings, sculpture, and hieroglyphics of this truly wonderful people, exhibit to the eye of the antiquary representations of many of the most important surgical operations. The administration of a clyster is said by their mythology to have been learned from the Ibis, who performed on the banks of the Nile, on its own person, this very necessary surgical operation.

"If," says Barron Larry, in his memoirs of Napoleon's campaigns in Egypt and Syria, "if we carefully examine the basreliefs, and the paintings on the ceilings and inside walls of the Temples of Tentyra, of Karnak, of Luxors, and of Medynet-abou, we may be convinced that surgery was practised as an art among the ancient Egyptians. * * * * It was under the reigns of the Pharos, Sesostrises, and the Ptolemies, that surgery appears to have attained to the same degree of perfection as the other arts. * * * * We also know that Hierophilus and Erostratus rendered the schools of Alexandria celebrated for their discoveries in anatomy, and by the success of their operations." According to the same author—"The early kings of this country practised surgery themselves."

Their historians pretend that Apis and Athotis searched the intestines of the dead, to discover the causes of the extraordinary mechanism of the animal functions, and that Hermes, Iris, Osiris, and Esculapius himself, cured the effects of many severe diseases by fire and the knife, others not less celebrated, knew how to extract the arrows that were thrown by barbarians, and to prevent or cure the violent symptoms that were always caused by their entrance into the sensible parts of the human body."

The Thebaic Tincture, which in later times was used extensively by the celebrated Sydenham, and by him, from its many good qualities, denominated Laudandum, (to be praised) in our vernacular termed *Laudanum*, derived its ancient name from the city of Thebes.

If the opinion of Barron Larry be correct, that the modern practice of medicine in Egypt is very nearly the same as the ancient, the following extract from his valued and interesting "Memoirs" will perhaps give us some idea of the practice among this ancient people. * "The common people prescribe for themselves when they have internal diseases, unless it be the plague, which a fatal prejudice causes them to abandon to nature.

* Larry's Men, vol. 1, page 358

They always know how to oppose inflammation, by regimen, cooling, acidulating drinks, and slight scarifications, which they perform with a razor, on the neck, temple, thorax, and lumbar region, and on the gastrocnemei muscles, according to the seat of the disease. Warm baths, enemata, anodynes, graduated, and uniform compression, over the whole surface of the body, etc., are also in use among them. In intestinal and putrid diseases, they use sweetened Tamarinds, and the infusion of Cassia and Senna—indigenous plants which the inhabitants cultivate in every part of Egypt.

"In asthenic diseases, they make use of Thearica, Tincture of Opium, Coffee, warm baths, and exercise; by this plan, internal diseases often terminate favorably.

"The Egyptian physicians use their medicine with but little preparation, in the form of powders, opiates or infusions. Their only compound medicine is Thearica, which is prepared with great solemnity. (See Prosper Alpinus.) The most common purge among the indigent class is made by keeping water of the Nile, or milk, for several hours, in an empty Coloquintida apple, and the fluid thus acquires all its purgative properties.

"The Egyptians have a great antipathy to emetics, and enemata, but they will of themselves take the latter, when very necessary, by means of a bladder and pipe; they also make great use of Opiates, prepared in different modes, as the disease or state of health may require. Opium and spices form the basis of their remedies for restoring the tone of the system, and for dissipating melancholy and sorrow. Aromatics are the principle ingredients used when they intend to promote the powers of generation and fecundity. Camphor, with an emulsion of the cold seeds, is successfully given to prevent fecundity, and the venereal appetite; they give it in large doses.

"The Hydrophobia, although more common in hot than in temperate climates, is not known in Egypt, and the inhabitants assured us that it never had appeared in man or beast."

Syphilis, small pox, the plague, and many cutaneous diseases are common in Egypt.

Inoculation has been practised in Egypt for a great length of time, but the important discovery of Jenner was not known in 1800.

"External diseases," says Barron Larry, "that require delicate operations, cutting for the stone hernia, amputations, etc., are unknown to the Egyptian physician at the present day. They who are effected by them, perish without assistance, or drag out a miserable existence." Obstetrics is in the hands of women, and is the same as that practised by the ancient Hebrews.

The simple dietetic, and medical rules, as found in the third Book of Moses, called Leviticus, show that the ancient Jews were afflicted with a variety of local and general diseases, which were treated in a very simple manner. And as Moses was learned in all the wisdom of the Magi of Egypt, we may conclude that his knowledge of medicine was up to the day in which he lived. This book, which may be considered the *medical* one of the five Books of Moses, commences with certain religious observances, in the way of burnt-offerings, meat-offerings, peace-offerings, and divers others, to which are added a classification of meats, clean, unclean, etc. These are followed by obstetrical regulations, regulations in reference to Leprosy, and issues; the latter by some supposed to be Syphilis. Gonorrhea, the plague, and several other diseases are mentioned, and certain observances in reference to them dictated. It will be seen that the setting apart, both in the Mosaic dispensation, as well as in other religious organizations, of certain days for fasting and feasting, and similar religious acts, is in accordance with strict dietetic or hygienic laws, and is peculiarly applicable to the several countries in which they are instituted.

The act of circumcision, which is common to all Eastern countries, and made by Moses a religious act, has doubtless a beneficial effect in those countries, in reference to sundry diseases of

the genital organs. The repeated ablutions inculcated by Moses, and afterwards by Mohammed, are very salutary in climates where the functions of the skin are greatly stimulated by heat and moisture.

From all that can be learned from both sacred and profane history, it will be seen that in addition to the simple dietetic, prophylactic, and curative treatment, indicated in these records, that much was expected from psychological or spiritual influences, which were expected to accompany the other modes of treatment; that in fact the practice of medicine was in the hands of the priesthood, and was consequently encumbered with a multitude of ceremonies and observances, whose influence was certainly over-rated by men whose occupation led them to depend upon ceremony and show, for the preservation and continuance of their power. Now, although medicine, as long as man is at once a spiritual, intellectual, and sentient animal, can never be divorced from spiritual and psychological influences, for no good physician can practice without a continual reference to these, yet material science, and an accurate knowledge of the physical laws of man, and of animate and inanimate nature, is of the first importance to the true medical practitioner; and is of itself sufficiently extensive to occupy the exclusive attention of the most devoted student of medical science. At least the medical practitioner should not be incumbered with the forms and ceremonies, much less with the professional prejudices of the priesthood. This separation, however, did not take place until about five hundred years anterior to the birth of Christ.

Pythagoras—who was the first of the Greek philosophers that practised medicine,—is said to have led it forth from the temple, into active life, and applied it to political economy, and legislation. In conclusion, we may state, in reference to the first period, that medical science had not assumed a definite form; we can therefore refer to neither theory nor medical speculations to illuminate the dark track over which we have passed. The simple manners and habits of the people, and the

want of definite ideas in the philosophy of the human mind, with the universal pursuit of either mere spiritual or mere temporal objects, without reference to the great principles of *reason and philosophy*, (a consciousness of which appears to have sprung spontaneously for the first time in the world's history in the beautiful land of the Hellenas,) precluded the possibility of our art being anything else than a mere art, without method and without science.

That portion of the Pelasgi which migrated to, and took possession of the Ionian and Grecian Isles, having adopted for political purposes the title of Hellenes, was doubtless the first to place on the foundation of truth, the principles of Philosophy.

"Here," in the language of Feuchtersleben, "the human power of thought developed itself in all directions, and diverging in numberless radii, filled that circle assigned to it by Providence, beyond which it cannot pass. The four points from which it diverged were the four great systems of Philosophy, denominated, respectively, Platonic, Aristotelian, Stoic, and Epicurean. In these four types the entire philosophy of antiquity is represented; and if we pursue them to their whole depth and extent, we may with truth affirm that they symbolise every direction of human thought which has assumed a complete and consistent character. If we would express their general scope in a few words, we might perhaps say that Plato represents the freedom of rational ideality; Aristotle, the legality of intelligible realism; Zeno, the intellectual view of the world; and Epicurus the material view; tendencies which are repeated at all times, and in all cases."*

The philosophy of Plato, which we have not time now to discuss, was revived and re-embodied by Stahl and his followers; and has been extensively used in medical reasoning ever since its first promulgation.

The philosophy of Aristotle, which makes the mind distinct from the body has been adopted by Theophrastus, of Eresus,

* Feuchtersleben, p. 27, Med. Psycol.

who has written a critical treatise on the senses. The "analytical investigation of nature, which Aristotle first prosecuted, by means of Autopsy and comparative Anatomy, taught him that man has, in proportion to his size, the largest brain; and he gave a description, which was true to nature, of its membranous coverings. The practical philosophy of Aristotle, as seen in his observations in science and morals, with the speculative philosophy of Plato, drawn from the gorgeous operations of his own mind, reciprocally unite and fill up the great field of human opinions. These two forms of philosophy, with their sub divisions—Ionian, Eleatic, and other sub-sects, are peculiarly Grecian; and not only originated, but have had their greatest development in Hellenic and analagous minds. The other two sects, the Epicurean, and the Stoic, although originating in Greece, have flourished most among the Romans and other nations of similar character. The doctrines of Epicurus may be best learned in the delightful pages of Lucretius, in his book "De rerum naturâ," which has been beautifully translated by a learned and distinguished member of our profession, Dr. Good; while that of Zeno may be studied in the writings of Senneca and Marcus Aurelius.

Atomism, or materialism, has its origin with Epicurus; the latter word, however, does not have the same force in the philosophy of Epicurus as it has in modern times. The doctrines of the Stoics are directly the reverse of the Epicureans, and aim at divesting man of all his physical identity, throwing him back upon his internal or mental self, teaching him in fact to be above the casualties, changes, ills, or pleasures of life. Both of these doctrines had full scope for their exercise in the history of the Romans.

The stoicism of a Roman, in the days of the commonwealth, is proverbial; while the luxury and refined imbecility in the latter days of the empire, were probably the most potent causes in inducing the downfall of that splendid structure. According to Feuchtersleben, "The idealism of Plato finds its parallel in

the theory of Heinroth. The criticism of Aristotle, in the reflections of Hofbauer, and others. While the Epicurean view of nature is seen 'in the extreme' of the so called Somatic theory of Psychopathy, as it appears in Combe, and Jacobi; lastly, to Stoicism above all in the writings of the learned Groos."*

To these we may add that Kant, in Germany; Locke, in England; and Descartes, in France, partake of the idealism of Plato; while the writings of Hippocrates, Sydenham, Haller, Bacon, and the most distinguished scientific minds of the present day, are based upon the philosophy now called the inductive, of Aristotle.

Modifications of the Epicurean theory will be found in the writings of Franklin, Voltaire, Rousseau, and other philosophers of the latter part of the last century; while Stoicism, in some of its practical forms, may be well seen in the doctrines and practices of George Fox and his followers.

Pythagoras and his followers gradually separated the science and art of Medicine from the Priesthood; and the Asclepiades, one of whose disciples was the immortal Hippocrates, established three great Medical Schools: at Rhodes, Cnidos and Cos; while Pythagoras established one at Crotona, and taught the science regularly. That at Cnidos was called the Empiric, while that at Cos, where Hippocrates was educated, was called the Philosophical.

The reputation of the sage of Cos is claimed for no less than seven men, and seven cities preferred their claims to the honor of being his birth place. He is with justice termed the "Father of Medicine;" and by his accurate observations of diseases, local, general and epidemic, the simplicity of his life, for he never married, but literally went about doing good, and the perspicuity and simplicity of his writings; he has won a fame which will last as long as medicine shall claim a niche among the sciences. He was born on the Island of Cos, 460 years before the Christian Era. He taught percussion of the chest, to detect the presence of water in that cavity; that wounds of tendons were likely to

* ib. p. 33.

be followed by tetanus; accurately examined the effects of the climate of Greece, in the production of disease, and described the epidemic diseases of the country; wrote some six books on Surgery, and, in fine, spent his whole life in untiring devotion to his profession in all its parts.

So great was his reputation, that deputations from cities waited upon him to visit them and heal their diseases. The inhabitants of Argos voted him a golden statue. He was more than once crowned by the Athenians, and what was then considered a greater honor than all the rest, was initiated into the mysteries of their worship. After his death, temples were built and altars dedicated to his worship by a grateful people.

In the next century we find the Greek physicians establishing schools in Alexandria and other Egyptian cities. Herophilus and Erasistratus were distinguished in these schools for their anatomical and surgical investigations. They were said to be the first to dissect human bodies; it is probable that the practice of emboweling and embalming the dead, in this country, gave the first facilities to those enterprising Greeks in their laudable undertaking.

Without following the history of Medicine, in Greece proper, under Praxagoras, Aristotle and many other distinguished men, we must pass with the current of History to Alexandria, thence to Rome and other portions of Italy.

"The student of Anatomy," says Dr. Bell, "is reminded of the name of Herophilus whilst learning the structure of the brain, a part of which is still called after its first describer. He is not, however, so generally informed of the singular merits and discoveries of both Herophilus and Erasistratus. The former pointed out the torcula, which still bears his name, and also the choroid plexus, and the calamus scriptorius. He regarded the brain as the centre of the nervous system; distinguished and named the duodenum, and gave a full, clear and admirable description of the liver. He pointed out also the vessels (the lacteals) in the mesentery containing milk; but his account is much

less definite and exact than that of Erasistratus, who says that it is only at particular times they are so found, being at others quite empty. This latter also taught that there were two classes of nerves, one for sensation, and the other for motion.

"The surgeons of the Alexandrian school distinguished themselves by the nicety of their dressings and bandages, of which they invented a great variety. Lithotomy was practiced by particular individuals who devoted themselves exclusively to that operation. We learn that one of them, Ammonius, employed an instrument by means of which he broke down stones in the bladder."*

The first Roman writer of note, one who, however, is a remodeler of Hippocrates, is Celsus.

This classical writer is well worthy the perusal. The chapters on air, water and diet, are still very valuable; his dissertations on fevers are an improvement on Hippocrates, while his two books on surgery exhibit many things in embryo, at least, which many think are modern improvements.

This author flourished, according to the best authorities, in the Augustan age,—probably in the reign of Tiberius—hence the purity of his diction, and the general beauty of his style, which have made him remarkable, even among the purely literary authorities of that age.

His works, as published in 1750, consist of eight books.

The first contains general rules for the preservation of health.

The second contains an account of the signs of health and disease, with a sketch of the several classes of medicines which act upon particular organs, or systems of organs of the Economy.

The third book gives a very accurate account of fevers in their several forms, and a short account of diseases of the nervous system.

The fourth book treats of internal diseases of the different organs, and might be denominated a treatise on the Phlegmasiæ.

The fifth book is a treatise on the Materia Medica, in which he

* Retrospect, 1837.

indicates the therapeutical uses of remedies, and gives us various prescriptions, remarkable even now for their simplicity. Cathartics, deturgents, emollients, diaphoretics, cataplasms, moxas, &c., are treated of.

The sixth book treats of diseases of individual portions of the body, as of the skin, of the eyes, ears, nose, teeth, tonsils, uvula, parotid glands and of what he very appropriately terms, "obscœnarum partium," in which, by the by, he apologises for the rough character of his own language, so different from the polished Greek, in expressing matters connected with the genital organs. A greater tribute could not be paid to the purity and beauty of that great language, than is here paid by a Roman medical writer.

The seventh book is entirely surgical, and so, also the eighth or last.

These two books are prefaced by a sketch of the character of a surgeon, surgical operations in general, and a short historical account of surgery in Egypt and Greece. He then proceeds to describe, among other things, tumors, suppuration, fistulæ, diseases of the eye and ear, polypi, varices, gangrene, &c. His remarks on fractures are very properly premised by a description of the position and figure of all the bones of the body; then follows an account of various surgical instruments, afterwards the individual fractures and luxations, with their treatment.

I cannot close this short account of the works of Celsus, without quoting his well known description of what a surgeon ought to be, "Esse autem Chirurgus debet adolescens," or, in plain English, "A surgeon," says he, "should be young, or at any rate, not very old; his hand should be firm and steady, and never shake; he should be able to use his left hand with as much dexterity as his right; his sight should be acute and clear; his mind trepid and pitiless, so that when he is engaged in doing anything to a patient, he may not hurry, nor cut less than he ought, but finish the operation just as if the cries of the patient made no impression upon him."

After Aretæus, who was very much admired by Boorhaave, and is said to have been the first to make use of blisters, we arrive in chronological order at Claudius Galenus; the next most distinguished of the ancient medical writers and practitioners. He was born, in the 131st year of the Christian Era, in Pergamos, of Asia Minor, and flourished during the reign of Marcus Aurelius. He was a man of extraordinary abilities and unbounded ambition. Having acquired a considerable medical reputation at Pergamos, he desired a wider field for the display of those abilities which he was conscious he possessed; and as Rome was then to the civilized world, what Vienna is now to Austria, Paris to France, London to Great Britain, or Philadelphia to the United States, he naturally turned his eyes to that great theatre of human strife and ambition. Packing up his little all, with a few letters of recommendation, he appeared in the great metropolis, and started in an humble way the practice of his profession. Very soon, however, opportunities occurred of exhibiting his superiority over the practitioners of the day.

It must be remembered that surgery, as a practical art, was never fairly established in Rome; that, tolerated for a time, its practitioners were repeatedly driven from the city, with the opprobrious epithets of butchers and murderers.

Young Galen having already attracted the attention, and excited the envy of some of his seniors in the profession, committed some overt act in the way of surgical operations or medical practice, which drew upon his devoted head so unmitigated a shower of invective and persecution, that he was forced to close his little shop in the Via Sacra, and return in disgrace to the place of his nativity, there perhaps to linger out his existence in obscurity and dishonor.

The impression which he had made, however, at Rome, was not lost, but, "like bread cast upon the waters," returned "after many days." His medical skill had been so much the theme of public conversation, that his very enemies were the means of carrying his reputation to the ears of the Emperor himself, who

sometime afterward, on one of the royal family becoming very ill, sent for the young doctor to be consulted in the case. It is said that before entering the room, on seeing the urine of the patient, he declared him to be laboring under disease of the liver. Successful in his first case, and enjoying the patronage of the Emperor, he very soon re-instated himself in his former position; and, ere long, from being driven out of the community, by the unjust opposition of his professional brethren, became a star of the first magnitude, and the voice of his enemies was either hushed into silence, or changed into praise. The re-action in his case, as in that of Sydenham, Luther, Rush and others, appears to have been equal to the depression produced by previous opposition; and his first writings partake of that free, independent spirit which men of his energy exhibit, when brought fairly out, on the field of competition.

The studies of his youth and the observations of his ripening manhood, were made to contribute in a way to effect medical science for centuries after his death. There is scarcely a division or sub-division of medical science on which he did not write, during the long season of triumph which he enjoyed in the city, which boasted the proud cognomen of "Mistress of the World;" but of all these, those which exhibit most the spirit of the man, the close, independent observer and thinker, are his first productions.

Commentaries upon the works of Hippocrates, essays upon minor and major Surgery, Pharmacy, Materia Medica, Anatomy and Obstetrics, followed in rapid succession, and became a species of Gospel to medical thinkers throughout the civilized as well as the christianized world.

From the fact that he was permitted in Rome, in common with his professional brethren, to dissect the bodies of foreign enemies, culprits, exposed children and slaves, his book on Anatomy was far in advance of anything that had been written on the subject, and was spoken of in terms of the highest commendation and praise by the great anatomist Vesalius, who flourished as

late as the sixteenth century. It was the text book in Anatomy for ages, until some of the bolder spirits in the schools of Salurnum, Holland and Germany, dared, by their innovations, to improve upon the text of the great master.

His character as a religious man, like that of Hippocrates, and most of the illustrious men who have adorned our profession, was exemplary. He breaks out into a burst of religious feeling in the preface to his treatise, "De usu partium," in a strain that would be worthy of a christian sage of the present day.

"In writing these books, I compose," says he, "a true and real hymn to that awful being who made us all; and, in my opinion, true religion consists not so much in costly sacrifices and fragrant perfumes offered upon his altars, as in a thorough conviction impressed upon our own minds, and an endeavor to produce a similar impression upon the minds of others, of his unerring wisdom, his resistless power and his all-diffusive goodness."

Oribasius and Arætius are entitled to consideration as historians of the art, and for having put on record many views and facts which would otherwise have been lost.

The former was prompted to undertake this task by the Emperor Julian.

The surgical writings of Arætius, who lived in the sixth century, are copious and valuable.

Alexander Trallianus, called a follower of Galen, has left a reputation for accurate description of disease, and philosophical attention to all the modifying circumstances of age, climate, sex, and constitution, which place him in advance of his master, as a valuable contributor to the science of medicine.

The last of the Græco-Egyptians, worthy of notice, is Paulus Ægineta, whose works have been lately published by the Sydenham Society, of London. He flourished towards the close of the fifth century. His writings will be found to consist in a condensed review of the practice of medicine and surgery of the day in which he lived.

Terse and to the point, his works still live as models of good

medical writing, analogous in style to those of Celsus, but burdened by a farago of prescriptions and medical directions, which in many instances appear ridiculous, and much out of place in the present day. They are well worthy the study of the diligent student, as containing, like those of Celsus, Galen and Hippocrates, accurate descriptions and delineations of local and general diseases. This author closes the second or ancient period. The true luminaries of which were Hippocrates and a few of his brethren, the Esclepiades, followed by Celsus and Galen, who were able commentators, and the latter a successful rival of the renowned "Father of Medicine."

This period may be characterized as one in which Medicine, by means of Pythagoras, Asclepius and their followers, separated herself successfully from the dominion of the priesthood, and exhibited, while thus standing upon her own merits, great improvements in her form and proportions to an intelligent world. The freedom of thought and general activity of the reasoning powers which existed so pre-eminently during this long period, were well calculated to free medicine, and all other sciences, from the thraldom of bigotry and ignorance. The varied climates in which medicine was cultivated, medical schools established, and medical works written, yielded sufficient variety of ills to which flesh is heir, to admit of descriptions of most of the diseases which may be found on the surface of the globe. The great reputation of Hippocrates carried him over a large territory and enabled him to observe diseases under a great variety of circumstances; while the central position of Galen, under the powerful patronage of the Emperor, enabled him to collect his facts from all parts of the then known world.

No period, perhaps, in the history of the world, with the exception of the present, or that which in its broadest sense has been denominated the modern, has combined so great an amount of talent in action, and so many facilities for the accomplishment of its purposes, as did the Græco-Roman and Græco-Egyptian.

But we must now pass on to the third, or dark age, in which

medicine, with all other science, fell back to the cloister, and for a number of centuries was almost shut out from the world. The mighty empire of Rome, from the very weight of its own members, had fallen into pieces; and as the authority of the State declined, that of the Church arose.

It would appear that the dismemberment of the Roman empire, was followed by innumerable wars among the various races of which it was composed; but that famine and pestilence came in and raged in order to complete the work of devastation and destruction.

The dreadful epidemics of the middle ages are fruitful themes for the pen of the historian; under the title of sweating sickness, dancing mania, black plague, syphillis, &c, they waged a long and fearful warfare with human life.

The wars between the Crescent and the Cross well nigh depopulated Europe, and sent thousands of her most promising sons to lay their bones down to bleach in the sands of Palestine and Syria. But few medical names enlightened the gloom of this dark period; these were chiefly physicians of Arabia, viz., Rhazes, Avicenna, Avenzoar, and Averrhoes. The Arabian physicians, during the peace which followed the conquests of the successful armies of Mahomet, dug up the manuscripts of the Greeks, and translated them into their own language, with notes and comments, and in this way revived medical science during the tenth and eleventh centuries. Two of these are honored in the great poem of Dante written during the latter part of the thirteenth, and the early part of the fourteenth centuries—with distinguished places among the learned and scientific.

The medical practice of Arabia, said to have been rather palliative than decided, and the various spices and gums of that charming climate, were used to the exclusion of the more severe remedies of the knife and cautery.

The practice of these learned physicians has affected our art to a considerable extent, and introduced into our Pharmacopœia, many of those gums and spices which are at once pleasant and

medicinal. It must be confessed that the bolder and more important operations in surgery, were neglected, much to the injury of our profession. This was perhaps in a measure atoned for by the superior attention paid by these physicians to medical practice. The profession has ever given to the great Sydenham the credit of introducing the cooling as it is termed, and more rational practice in small pox, and other cutaneous and febrile diseases; yet a moment's reference to the works of Rhazes on this subject, as translated by Dr. Richard Mead of London, will convince us that the practice so well taught by Sydenham, was also taught and resorted to by Rhazes. It is true that men of original minds, correct the errors of their cotemporaries as it were spontaneously, and these improvements are as much their own as if they had never been promulgated before their day. In reference to the treatment of small pox, Rhazes lays down, says Dr. John Bell, of this city, in an admirable synopsis of his treatise on small pox, the mode of prevention or of diminishing its violence, if it does come on the person exposed to the contagion, during the season when the disease prevails. He recommends with this view venesection for adults, and topical bleeding by cups, for children, water cooled with snow for drink, and also acidulated barley water.

The food to consist of the lighter meats, lentils and saccharine fruits, with the abstinence from wine, the more stimulating kinds of flesh condiments and spices. Cool bathing is allowed, but the warm bath is prohibited as also fatigue, venereal indulgences and exercising in the sun; the bowels are to be kept open by simple means, as the juice of Prunes and sugar, or whey and sugar; some prescriptions are given for this period, composed chiefly of vegetables, acid, sugar and camphor.

Dr. B. then proceeds with his synopsis through all the stages of small pox; the two latter chapters treating of the signs of a fatal disease, or otherwise of prognosis.

This first division or the scholastic under the title of the dark ages, is well worthy of study and investigation.

The learned Hecker who has paid most attention to the medical history of this period, and whose works are, or ought to be, in every body's hands, has well delineated a number of the great epidemics referred to above.

The black plague has been painted with a master hand and in the extensive Museums at Florence, to this day, the wax preparations representing this are those which strike the beholder with the greatest horror.

"The dancing mania" has been well described by this author; of this he says there are several varieties, viz., St. John's dance, St. Vitus dance, &c. In reference to the black plague, he thus begins his account of that disease. The most memorable example of what he advanced is afforded by a great pestilence of the fourteenth century, which desolated Europe, Asia and Africa, and of which the people yet preserve the remembrance in gloomy traditions. It was an oriental plague, marked by inflammatory boils and tumors of the glands, such as break out in no other febrile disease.

On account of these boils and black spots, indicatory of a putrid decomposition, which appeared upon the skin, it was called in Germany, and in the northern kingdoms of Europe, the *black death*, and in Italy, la mortalega grande, "the great mortality." Boccacio, in his Decameron, first day, gives the best description of the disease extant, as it appeared at Florence. It commenced here, (I quote from Hecker) "not as in the East, with bleeding at the nose—a sure sign of inevitable death—but there took place, at the beginning, both in men and women, tumors in the groin and in the axilla, varying in circumference up to the size of an apple or egg, and called by the people 'pest boils,' (gavioccioli.) Then there appeared similar tumors indiscriminately over all parts of the body, and black or blue spots came out on the arms or thighs, or on other parts, either single and large, or small and thickly settled. These spots proved equally fatal with the 'pest boils,' which had been from the first regarded as a sure sign of death. No power of medicine brought relief

—almost all died within the first three days, some sooner, some later, after the appearance of these signs; and, for the most part, entirely without fever, or other symptoms. The plague spent itself with greater fury, as it communicated from the sick to the healthy, like fire among dry and oily fuel, and even contact with the clothes and other articles which had been used by the infected, seem to induce the disease. As it advanced, not only men, but animals fell sick, and shortly expired, if they had touched the things belonging to the diseased, or dead. Thus Boccacio himself, saw two hogs on the rags of a person who had died of Plague, after staggering about for a short time, fall down dead, as if they had taken poison. In other places multitudes of dogs, cats, fowls, and other animals, fell victims to the contagion; and it is to be presumed that other epizootes among animals took place, although the ignorant writers of the fourteenth century are silent on this point." This description corresponds with that given by Thucydides, of the plague of Athens, and reminds us of the following lines of Homer, in his account of the plague in the Grecian army at the siege of Troy:—

> "On mules and dogs the infection first began—
> At last the vengeful arrows fixed on man."

But we must close this short and imperfect account of the first portion of our third period. It was a period in which the most charitable writers declare there was a species of incubation —the world was dark and gloomy, but only so preparatory to breaking out into those brilliant epochs which followed, whose lustre still irradiates our world. In the language of Pope—

> "With tyranny *then* superstition joined,
> As *that* the body, *this* enslaved the mind;
> Much was believed, but little understood,
> And to be dull was construed to be good:
> A second Deluge learning thus o'erran,
> And the monks finished what the Goths began."

But here, as in everything else, "the darkest hour precedes the dawn;" and hence, we find in our profession, men who

arose above the gloom around them, soiled it is true, and deformed by the bigotry and ignorance of the age, yet, nevertheless, bold gladiators, on the world's arena for mental improvement, and the victory of truth. Among them was Paracelsus, whose many peculiarities, bold and bombastic pretensions, with his remarkable life and death, have been the themes of historians and medical writers ever since. In an age when Aristotle and Hippocrates were deities in Philosophy and Medicine, for a man to assert that there was more philosophy in his great toe than in all the learning of the colleges, and the ancients, was enough of itself to draw upon his head, if not the contempt, at least, the ridicule of the world. It is supposed that he met his death by poison. He professed to possess an elixir which would prolong life indefinitely, and yet died with a bottle of it in his pocket. Nevertheless, his very boldness with the many *real* improvements which he accomplished, broke the ice, and from his day, the era in the revival of literature and science, is dated. The great reformation in Germany, starting from the caustic pen of Erasmus, in Geneva, and thundered into existence by the mighty voice of Luther, and his compeers, over different points of the continent, began its glorious march, which it is hoped will be continued until man is disenthralled of everything which tends to debase his intellectual, moral and physical nature.

Rome herself threw off the lethargy of ages, and her pontiffs vied with each other in forwarding the great work of human enlightenment. It was then that St. Peter's took its present magnificent form and proportions, under the master mind of Michael Angelo. The celebrated indulgences of Pope Leo X. brought so many pilgrims to the Holy City, and so much money to the portals of this ancient fane, that we are told Priests stood night and day, with rakes in their hands, in the vestibule, *raking in the coin!* It was then that painting, sculpture, and all the fine arts, started, into a renovated existence, so well described by Pope, in the following lines :—

"But see, each muse, in Leo's golden days,
Starts from her trance, and trims her withered bays,
Rome's ancient Genius, o'er its ruins spread,
Shakes off the dust, and rears his reverend head.
Then Sculpture, and her sister arts revive,
Stones leap to form, and rocks begin to live.
With sweeter notes, each rising temple rung,
A Raphael painted, and a Vida sung."

This astonishing revival of the human energies was by no means confined to any one part of the civilized world. Copper engraving, which originated in Italy, was soon followed by the discovery of the art of printing, by Guttenberg, of Mentz, in Germany; and these two means of disseminating knowledge were soon in active operation in England, France, and the rest of Christendom. In Italy, Dante, Ariosto, Boccacio and Tasso —particularly the first—stamped upon the ages in which they lived, the impression of their genius, and formed the Italian language. From this school, the earlier English authors, as Chaucer, Spenser, Milton and Dryden, drew the material on which the early British classics are founded, which may be considered the basis of the English language. The great Paschal, Abelard, Spinosa, Rousseau, Voltaire, and others on the Continent, were the founders of its philosophy and literature.

Medical Schools were established in Salernum, Montpelier, Verona, Naples, Bologna and Paris—Holland and Germany; which gave intellectual birth to Mascagni, Ruysch, Spallansani, Fallopius, Eustachius, Lancisi, Morgagni, Molinelli, Bertrandi, Guattani, Matani, Troja, Moscati, Albinus, Deventer, Sandifort and Camper, the last three flourished in Holland; Haller, Heister, Platner, Roederer, Richter, Beer, Hufeland, Langenbeck, Rust and Walther, in Germany. In Great Britain we have Cheselden, Winslow, Willis, Douglas, White, the two Monroes, Sharp, Freind, and many others of the older physicians and surgeons, who either obtained their medical education entire, or in part, in the schools of Italy, or on the Continent; as has

been the case with young men of this country, in their visits to different seats of learning in Europe.

But time will not permit my finishing this, the latter part of the third period, much less of *attempting* the fourth division of our subject. I must, then, leave this, the most interesting portion of the whole, to other and more competent hands, or, perchance, take it up at another time. For the present, my only apology for introducing the subject of this discourse at all, is, the universal and just complaint, made by the more literary portion of the profession, of the neglect of this very necessary part of a medical education. True, the complaint is not confined to this country: Dr. Hecker, in his address to the physicians of Germany, holds the following language:—

"The study of Medical history is everywhere at a low ebb; in France and England scarce a trace remains, to the serious detriment of the whole domain of medicine; in Germany, too, there are but few who suspect what inexhaustible stores of instructive truth are lying dormant within their power; they may, perhaps, class them among theoretical doctrines, and commend the laborious investigation of them, without being willing to recognise their spirit. None of the universities of Germany, whose business it ought to be to provide, in this respect, for the prosperity of the inheritance committed to their charge, can boast a Professor's chair for the 'History of Medicine.' . . . . So that it is to be apprehended, that the fame of German erudition may, at least in medicine, gradually vanish, and our medical knowledge become as practicable indeed, but, at the same time, as mechanical and as defective, as that of France and England."

My learned friend, Dr. John Bell, of this city, writes, in 1837, in reference to one of the Ancients, as follows:—

"But we grieve to say that, by no medical school or teacher in this country, as far as we have learned, are the careful perusal and study of Celsus recommended. In no University or Institution for teaching the languages, with us, is this author,

whose pure Latinity has ever been extolled, put into the hands of the student. He who has been called the Latin Hippocrates, for the quantity of his sound, practical information, and the Cicero of physicians, for the elegance of his style; and who has left directions for the use of exercise and diet, in the cure of indigestion, rivalling the best at the present time, is not known, except by name, to a tithe, might we not say, without injustice to one in a hundred, of our professional brethren."

With these facts before us, I think I can answer for my colleagues and myself, that, as far as the present established courses will permit, this hiatus will be filled up in the Philadelphia school of Medicine. Doubtless the pride which we all feel in the institutions of our country, should stimulate us to application in this and every other study which is calculated to advance our *national medical character*—for, in the language of Scott,—

"Breathes there a man, with soul so dead,
Who never to himself hath said—
This is *my own*, my native land!
Whose heart hath ne'er within him burned
As home his footsteps he hath turned,
From wandering on a foreign strand:
If such there breathes, go, mark him well,
For him no minstrel raptures swell,
High tho' his title, proud his name,
Boundless his wealth, as wish can claim,
Despite those titles, power and pelf,
The wretch concentred *all* in self—
Living, shall forfeit fair renown,
And, doubly dying, shall go down
To the vile dust, from whence he sprung
Unwept, unhonored, and unsung."

I have only to add, in conclusion, that the faculty of the Philadelphia College of Medicine welcome you to their halls of science, and hope, nay, are persuaded, that the genial season of Spring, in which all nature partakes of a renewed existence, will add additional zest to those delightful and dignified

studies which are before you. That both teacher and pupil, as they walk hand in hand through the varied fields of science, may be cheered and strengthened by mutual good will and reciprocal industry. That our Spring course, which, you will remember, is, in every respect, as full and complete as the winter courses, may be terminated as profitably and advantageously to you as your brightest anticipations may have pictured—and, that, for the accomplishment of these purposes, we, as a faculty and as individuals, pledge, on our part, the daily, honest and laborious performance of the duties which pertain to our respective *Chairs*.